

To Our Valued Customers,

This PCN affects our LPC4088 OEM board (product number: EA-OEM-010). This board is also sold as part of the LPC4088 Developer's Kit (product number: EA-OEM-510).

NAND Change

The NAND flash (U16) currently mounted on the EA-OEM-010 board is obsolete.

The currently mounted component (Samsung K9F1G08U0D-SIB0) will be replaced by Macronix MX30LF1G08AA-TI.

The new NAND component is very compatible. There are however four major differences that are important to be aware of:

NAND chip	Samsung K9F1G08U0D-SIB0	Macronix MX30LF1G08AA-TI
Status	Old, now obsolete	New
Differences		
Random page read operation	35 us (max)	25 us (max)
Page program time	250 us (max)	700 us (max)
Block erase time	2 ms (max)	3 ms (max)
Read ID operation (command 0x90)	First byte: 0xEC Second byte: 0xF1 Third byte: 0x00 Fourth byte: 0x15 Fifth byte: 0x40	First byte: 0xC2 Second byte: 0xF1 Third byte: 0x80 Fourth byte: 0x1D No fifth byte

Depending on how general and flexible the NAND flash driver you have implemented in your system, these timing and ID changes may, or may not, be handled automatically. The timing changes are typically handled automatically if the ready/busy signal is sampled instead of using fixed delays in the driver code.

Product Change Note (PCN) EA-OEM-010



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Identification

The new NAND flash will be mounted on boards produced after March 2016. All boards from Embedded Artists have a marking: WO-XXXX-YYWW, where XXXX is the WO-number. YY is the year and WW is the week number when the board was produced.

The affected boards will have a WO-number above or including: $XXXX \geq 0688$

Kind Regards,
Embedded Artists AB
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Embedded Artists AB
Davidshallsgatan 16
SE-211 45 Malmö
Sweden

Phone/Fax: +46 (0)40-611 00 93
E-mail: info@embeddedartists.com
<http://www.embeddedartists.com>

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